

WE CLAIM:

1. A method of providing a synchronization pattern for use in a communications system comprising the steps of:
 - generating a synchronization pattern;
 - distributing the synchronization pattern over a segmented information signal, wherein the distributed synchronization pattern defines boundaries between groups of segments in the segmented information signal; and
 - distributing a segmented index over a particular group of segments in the segmented information signal, the segmented index distinguishing the particular group of segments from other groups of segments.
2. The method of claim 1, wherein the synchronization pattern is at least one of a random pattern, a pseudo random pattern, and a periodic function.
3. The method of claim 1, wherein the synchronization pattern is produced by a linear feedback shift register (LFSR).
4. A method for communication stream synchronization in a communications receiver comprising the steps of:
 - receiving a segmented information signal, wherein the segmented information signal includes a distributed synchronization pattern and a distributed frame index;
 - collecting the distributed synchronization pattern from the segmented information signal;
 - collecting the distributed frame index from the segmented information signal;
 - correlating the collected distributed synchronization pattern with a known synchronization pattern, wherein the correlation defines boundaries for groups of segments in the segmented information signal; and
 - evaluating the collected distributed frame index, to identify which group of the groups of segments in the segmented information signal has been received.

5. The method of claim 4, wherein the synchronization pattern is a selected one from a group including a random pattern, a pseudo random pattern, and a periodic function.

6. The method of claim 5, wherein the synchronization pattern is produced by a linear feedback shift register (LFSR).

7. The method of claim 4, wherein the distributed frame index includes an error correcting code.

8. The method of claim 7, wherein the error correcting code is produced using a Hamming code.

9. A system for providing a synchronization pattern for use in a wireless communications system comprising:

a transmitter configured to transmit information over a wide area on a predetermined schedule;

a mobile device including a receiver, the receiver being configured to receive the transmitted information; and

a broadcast signal, transmitted by the transmitter and including a segmented information signal that further includes a distributed synchronization pattern and a distributed frame index,

wherein each segment of the segmented information signal further comprises:

a header, including one or more marker bits, a portion of the distributed synchronization pattern, and a portion of the distributed segment index; and

a payload, including data.

10. The system of claim 9, wherein the distributed synchronization pattern is at least one of a random pattern, a pseudo random pattern, and a periodic function.

11. The system of claim 10, wherein the synchronization pattern is produced by a linear feedback shift register (LFSR).

12. The system of claim 9, wherein the distributed frame index includes an error correcting code.

13. The system of claim 12, wherein the error correcting code is produced using a Hamming code.

14. A method of providing and receiving a synchronization pattern for use in a wireless communications system comprising the steps of:

generating a synchronization pattern;

distributing the synchronization pattern over a segmented information signal, wherein the distributed synchronization pattern defines boundaries between groups of segments in the segmented information signal;

generating a segmented index;

distributing the segmented index over the segmented information signal, wherein the segmented index identifies a particular group of segments in the segmented information signal;

transmitting the segmented information signal over a wireless medium;

receiving at least a portion of the segmented information signal;

collecting the distributed synchronization pattern from the received segmented information signal;

collecting the distributed segment index from the received segmented information signal;

correlating the collected distributed synchronization pattern with a known synchronization pattern, wherein the correlation defines boundaries for groups of segments in the segmented information signal; and

evaluating the collected distributed segment index to identify which group of the groups of segments in the segmented information signal has been received.

15. The method of claim 14, wherein the synchronization pattern is at least one of a random pattern, a pseudo random pattern, and a periodic function.
16. The method of claim 14, wherein the synchronization pattern is produced by a linear feedback shift register (LFSR).
17. The method of claim 14, wherein the segmented index includes an error correcting code.
18. The method of claim 17, wherein the error correcting code comprises a Hamming code.
19. A computer-readable medium encoded with a data structure for communication stream synchronization in a communications system, the data structure comprising a plurality of segments of data, wherein each segment includes at least two data fields, a synchronization pattern field and an index field, wherein a portion of a synchronization pattern is included in the synchronization pattern field of each segment, and a portion of an index that distinguishes the data stream from other data streams is included in the index field of each segment.
20. The computer-readable medium encoded with the data structure of claim 19, wherein the synchronization pattern is a selected one from a group including a random pattern, a pseudo random pattern, and a periodic function.
21. The computer-readable medium encoded with the data structure of claim 19, wherein the synchronization pattern is produced by a linear feedback shift register (LFSR).
22. The computer-readable medium encoded with the data structure of claim 19, wherein the index includes an error correcting code.

23. The computer-readable medium encoded with the data structure of claim 19, wherein the error correcting code is produced using a Hamming code.